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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,165	09/17/2001	Patrick Alexander Heller	21122-04	9236

7590 08/15/2003

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EXAMINER

CARTAGENA, MELVIN A

ART UNIT	PAPER NUMBER
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3754

DATE MAILED: 08/15/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/869,165

Applicant(s)

HELLER ET AL.

Examiner

Melvin A. Cartagena

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8-13 is/are rejected.
- 7) ☒ Claim(s) 6 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Election/Restrictions

1. Claims 14-38 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in Paper No. 7.

Specification

2. The disclosure is objected to because of the following informalities: in page 4 line 21, it appears the reference number "22" should be --28--.

Appropriate correction is required.

Claim Objections

3. Claim 1 is objected to because of the following informalities: in line 6, it appears the word "distil" should read --distal--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 10, 11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by US 3,477,773 to Huber.

Huber shows an airflow valve as seen in Fig. 1, an internal cavity 8 with an annular space, an inlet 12, a valve seat coaxial with the outlet 13 and located below the upper most edge of the inlet and approximately one third the diameter of the inlet above the inlet center line, a

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diaphragm 11, control means 1, suitable connections to air flow conduit by external threads and a spring 14.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3, 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 3,477,773 to Huber in view of GB 2155593 to Ballu.

Huber shows all claimed features as discussed above except for a male screw threaded cap. Ballu shows a male screw threaded cap 13. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to use a male screw threaded cap in the device of Huber as taught by Ballu since the above combination represents a substitution of well known alternative equivalent fastening means to secure the cap which is well within the level of ordinary skill in the art.

8. Claims 8, 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 3,477,773 to Huber in view of US 5,520,366 to Elliott.

Huber shows all claimed features as discussed above except for the outlet walls tapering convergently from the valve seat towards the outlet and the diaphragm having a bleed hole. Elliot shows a diaphragm valve with tapering walls towards the outlet as seen in Fig.1 and a bleed hole 32. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to modify the device of Huber to include tapering walls and a bleed hole as taught

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by Elliott to improve the valve flow characteristics and provide a port to equalize the pressure across the diaphragm.

Allowable Subject Matter

9. Claims 6 and 7 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tomiyoshi shows a feed valve. Otto shows a pilot operated valve. Huang shows a low profile magnetic operated valve. Gradclement shows an electric valve. Sweeney shows a pressure-reducing valve. Beller shows a valve device.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin A. Cartagena whose telephone number is (703) 308-5810. The examiner can normally be reached on M-F (7:30AM to 4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Louis G. Mancene can be reached on (703) 308-2696. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.

MAC 8/9/03
MAC
August 9, 2003


Gene Mancene
Supervisory Patent Examiner
Group 3700